

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference 7.216	<b>FOR FURTHER ACTION</b>		See item 4 below
International application No. PCT/IB2005/050363	International filing date ( <i>day/month/year</i> ) 27 January 2005 (27.01.2005)	Priority date ( <i>day/month/year</i> ) 28 January 2004 (28.01.2004)	
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237			
Applicant <b>ARCELIK ANONIM SIRKETI</b>			

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 6 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

Date of issuance of this report 31 July 2006 (31.07.2006)
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Authorized officer
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<b>Cecile Chatel</b>
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Form PCT/IB/373 (January 2004)

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

REC'D 02 MAY 2005

PCT  
WIPO

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## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

### FOR FURTHER ACTION

See paragraph 2 below

International application No.  
PCT/IB2005/050363

International filing date (day/month/year)  
27.01.2005

Priority date (day/month/year)  
28.01.2004

International Patent Classification (IPC) or both national classification and IPC  
H05B6/66

Applicant  
ARCELIK ANONIM SIRKETI

#### 1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or Industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

#### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

#### 3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
PCT/B2005/050363

**Box No. I Basis of the opinion**

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - a sequence listing
    - table(s) related to the sequence listing
  - b. format of material:
    - in written format
    - in computer readable form
  - c. time of filing/furnishing:
    - contained in the international application as filed.
    - filed together with the international application in computer readable form.
    - furnished subsequently to this Authority for the purposes of search.
3.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

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**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or  
industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes: Claims	1
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1
Industrial applicability (IA)	Yes: Claims	1
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

**Re Item V.**

**1** Reference is made to the following documents:

D1 : EP 0 279 514 A (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD) 24 August 1988 (1988-08-24)  
D2 : US 4 956 581 A (NILSEN ET AL) 11 September 1990 (1990-09-11)

**2 INDEPENDENT CLAIM 1**

**2.1.-** The present application does not meet the criteria of Article 33(1) PCT, because the subject matter of claim 1 does not involve an inventive step in the sense of Article 33(3)PCT.

**2.1.1.-** Document D1, which is considered to represent the most relevant state of the art to the subject matter of claim 1, discloses (the references in parentheses applying to this document) a high-frequency heating device (*see abstract*) comprising:

- a magnetron generating microwave energy (*see Fig. 1, element 19*);
- a filament circuit (*see Fig. 1, elements 14 and 20*);
- an inverter which ensures that the magnetron is powered by high-frequency rectified voltage via the energy obtained from the network (*see Fig. 1, elements 5 and 4*) and which incorporates a wave multiplexer (*see Fig. 1, elements 15-18*) whereby the voltage obtained from the high-frequency current coming from the resonant circuit is multiplied by being raised and rectified (*see column 1, lines 42-46*).

**2.1.2.-** The subject-matter of independent claim 1 differs from the disclosure of D1 in that the high-frequency heating device further comprises a low-pass filter placed between the wave multiplexer and the ground.

**2.1.3.-** The problem to be solved by the present invention may therefore be regarded as provide a circuit for feeding a magnetron with a current which has been smoothed and in which low-frequency noise has been eliminated.

**2.1.4.-** The skilled person would regard the use of a low-pass filter as a normal design option to include in the inverter of the high-frequency heating device described in document D1 in

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

International application No.

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order to solve the problem posed, specially because said low-pass filter has already been used in a similar circuit (*see D2; abstract and Fig. 2, "L"*).

**2.1.5.-** Therefore the features disclosed in D1 and D2 would be combined by the skilled person, without exercise of any inventive skills in order to solve the problem posed. The proposed solution in independent claim 1 thus cannot be considered inventive (Article 33(3) PCT).